

## COMBINATORIAL CHEMICAL SYNTHESIS

### ABSTRACT OF THE DISCLOSURE

Combinatorial synthesis methods obtain a plurality of compositions having materially different characteristics using an apparatus having a plurality of collectors. A first quantity of fluid reactants are reacted to form a first quantity of product composition. Following completion of the collection of the first quantity of product composition, a second quantity of fluid reactants are reacted to form a second quantity of product composition, the second quantity of product composition being material different from the first quantity of product composition. An apparatus includes a nozzle connected to a reactant source and a plurality of collectors. The nozzle and plurality of collectors move relative to each other such that a collector can be selectively placed to receive a fluid stream emanating from the nozzle. The plurality of product compositions can be evaluated to determine their suitability for various applications.